

Construction Industry: Indian Scenerio

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Abstract:

The construction sector is the largest industrial employer of the world. Status of Construction sector in any economy indicates its development level as it reflects investment for development. In any developing economy priority is eradicating poverty and other problems of backwardness. After meeting these basic needs only they gain strength to take up works related to development or expansions. Although, construction sector is an important for economy to take off in India this sector has gained importance in the recent years mainly because almost all the five year plans devoted more on rural development, agricultural development, and industrial sector development. Focus on industrial development also is a recent phenomena which demands other sub sectors support. Construction sector is one such, which is important to create infrastructure required for the expansion, development with multiplier effect and welfare of the people. Construction

Indian Construction sector is growing, employing large labour force, and facilitating industrial growth and supporting National GDP growth. In view of this, there is a need to understand the growth and future prospectus of the construction sector in India]

Key Words: Construction Industry; Employment; Infrastructure; government Programme; Real estate

Introduction

Construction industry is an important sector of any economy which gains momentum with development. As development takes, it is another way of utilizing resources for human welfare and to take the development further to the higher level. In India, construction industry is the second largest industry employing labour force after agriculture. It implies that construction sector is labour-intensive, and in India it employees more that 50 million labour force. The construction industry is highly fragmented and has backward and forward linkages with several other industries like Cement, Steel, Tiles, Wood, Furniture, Electronics, Electric etc. The three main segments of Construction industries are Real estate, Infrastructure, and Industries.

Construction sector in India is growing, its contribution to GDP is significant, employment opportunity it provides is remarkable, technological transformation in construction sector accelerates its growth. At this backdrop, it makes more interesting

to probe into the economics of construction sector and the nature of its growth in Indian context. Such an attempt is made in this paper.

Objectives

Main purpose of this paper is to analyse the economics of construction industry in India. The specific objectives are;

1. To analyse the size, growth and economic issues of construction Industry in India
2. To examine the Current scenario of the Indian construction industry in India

Methodology

Analyzing the economics of construction industry in India is based on secondary data and review of literature. Investment, contribution to GDP, employment potential, are the main parameters highlighting construction industries economics. Further, its sub-sectors and their expansions, growth of the industry are analyzed.

Construction Industry

The construction market in India is one of the largest in the world. Valued at \$609.6 billion in 2021, it is expected that Cumulative Average Growth Rate (CAGR) growth rate would be between 6-10 percent by 2028. Along with China, the United States, the United Kingdom, and Indonesia, India is able to remain in the top five largest construction markets in the world. In fact, only China, India, the US and Indonesia are projected to account for 58.3 percent of expected global growth in construction. Construction industries are expanding with economic development and development promotes construction sector. They are mutually fabricated. The construction sector in India is a developing sector, and in the last five decades it has witnessed a boom, especially in big cities such as Delhi, Mumbai, Chennai, and Bangalore. Moreover, according to the National Sample Industry Organization, the growth of employment in the sector has been remarkable.

The construction industry market in India works across 250 sub-sectors with linkages across sectors. The main sectors of construction industry are Residential, Institutional and Commercial, Specialized Industrial, Infrastructure and Heavy. The key sectors in the India construction market are commercial construction, industrial construction, infrastructure construction, energy and utilities construction, institutional construction, and residential construction.

India's construction industry was valued at over three trillion Indian rupees in fourth quarter of 2022. This was a significant increase compared to 2020, when the value declined due to the Corona virus (COVID-19) pandemic. The country's construction and manufacturing industries were among the worst hit during Covid-19. However, the industry seemed to recover quickly and returned to the earlier level again.

Construction sector and GDP

It contributes more than 5.0 per cent to the nation's GDP and 78.0 per cent to the gross capital formation. In India Construction sector has accounted for around 40.0 per cent of the development investment during the past 50 years. GDP from Construction at factor cost (at current prices) increased to ₹ 1.745 billion (12.02% of the total GDP

) in 2004-05 from ₹ 1,162.38 billion (10.39% of the total GDP) in 2000-01.

The construction Industry in India is expected to reach \$1.4 Tn by 2025. The Real Estate Industry alone in India is expected to reach \$1 Tn by 2030 and to contribute around 13.0 percent to India's GDP. Urbanization and growing Cities are the main drive for the growth of construction sector. Schemes such as the Smart City Mission (target 100 cities) are expected to improve quality of life through modernized, technology driven urban planning.

The share of the Indian construction sector in total gross capital formation (GCF) came down from 60 per cent in 1970-71 to 34.0 per cent in 1990-91. Thereafter, it increased to 48 per cent in 1993-94 and stood at 44 per cent in 1999-2000. In the 21 st Century, there has been an increase in the share of the construction sector in GDP and capital formation.

Government and Construction Sector

Major government departments associated with construction sector are Housing and Urban Development Corporation Ltd., Department of Drinking Water and Sanitation, Ministry of Housing and Urban Affairs, Ministry of Rural Development, National Building Construction Corporation (NBCC) Ltd., and National Industrial Corridor Development Corporation. In addition to State governments Public work departments also are associated with Construction sector.

During 2022-23 Annual budget, the government announced a capital expenditure of Rs. 7.5 trillion (\$99 billion). Of the total, the highest proportion of expenditure (almost 25.0 percent) was allocated to the Ministry of Road Transport and Highways. According to the Ministry of Statistics and Program Implementation, the construction industry's value add rose by 8.0 percent year on year in the first half of 2022. According to the Ministry of Road Transport and Highways, the pace of National Highway construction slowed from 22.3km per day in the first five months of FY 2021-22 to 19.4km per day during the same period of FY 2022-23. The government is unlikely to meet its target of building 40km of highway per day in the current fiscal year, as it now has to build 55km of highway per day in the remaining seven-month period to meet its target.

Construction industry is supported by a strong pipeline of infrastructure projects. According

to the Infrastructure and Project Monitoring Division of the, as of September 1, 2022, India had 1,526 projects in the pipeline, valued at Rs. 25.9 trillion (\$337.7 billion). In this, the road transport and highway sector account for the highest number of projects in the pipeline (54.5 percent), this is followed by railways (11.3%), petroleum (9.1%), coal (8%), power (5.1%), and water resources (2.7%). Financial assistance from a multitude of international financial institutions will further support demand in the Indian construction industry. In July 2022, the World Bank approved loans worth Rs. 34.3 billion (\$1.8 billion) to support the development of India's healthcare sector, and drive private sector investment. Of the total, Rs.76.7 billion (\$1 billion) was allocated to support the country's flagship Pradhan Mantri-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM), in order to improve public healthcare infrastructure across the country.

Budget 2023-24, highlights the importance of infrastructure development, urban planning, affordable housing, domestic manufacturing, ease of doing business, and energy transition with a focus on sustainability. This would encourage the growth of construction sector.

Demand for the construction of office spaces, hotels, retail, entertainment units are increasing. The net office space absorption across India's largest six Cities stood at 31.9 Mn sq.ft. in 2020.

Union Budget 2023-24 and Infrastructure

- Prime Minister Awas Yojana expenditure increased by 66.0 percent to Rs.79,000 crore.
- Railways will receive a capital outlay of Rs.2.4 lakh crore, the highest allocation ever since 2013-14.
- Public agencies will use the Urban Infrastructure Development Fund (UIDF), which will be administered by the national Housing Bank, to build urban infrastructure in class-II and Class-III cities. The UIDF will be established through the use of the priority Sector Lending shortfall.
- Investments totaling Rs.75,000 crores (Rs.15,000 crores from private sources) will be made in 100 vital transportation infrastructure projects to provide last and

first mile connectivity for the coal, ports, food grain, steel, and fertilizer grains sectors.

- The creation of the New Infrastructure Finance Secretariat will increase opportunities for private infrastructure investment.
- Government will establish an Urban Infrastructure Development Fund, similar to the Rural Infrastructure Development Fund, which will be run by NHB.
- A one-year extension of the 50-year interest-free loan to state governments in order to encourage them to adopt complementary policies and encourage infrastructure investment.
- Prompting states and local governments to implement urban planning changes and initiatives aimed at transforming their cities into "sustainable cities of tomorrow."
- Convert all cities and towns to a machine-hole system by allowing them to completely mechanically desludge their septic tanks and sewers.

The government set aside Rs.5.5 trillion (US\$78.2 billion) for capital investment in the 2021-2022 budget. The number of projects in the National Infrastructure Pipeline (NIP) was also increased.

Investment on Infrastructure

Infrastructure build-out results in more investment, and more businesses to be set up, which leads to both direct and indirect job creation. With more jobs there is more consumption of goods and services, thereby resulting in a virtuous cycle.

On an average, European countries spend 5.0 percent of GDP on infrastructure, while China spends roughly 8.0 percent, and U.S. spends only 2.4 percent of its GDP on infrastructure and India spends about 4.0 percent of GDP. The infrastructure sector forms the core engine of any economy. It has significant linkages to all the other sectors of the economy and powers the GDP of the country. Infrastructure spans highways, power plants (solar, nuclear, hydel, wind), telecommunications, rail corridors, airports, seaports, etc.

Under National Infrastructure Pipeline (NIP), India has an investment budget of \$1.4 Tn on infrastructure - 24.0 percent on renewable energy,

19.0 percent on roads & highways, 16.0 percent on urban infrastructure, and 13.0 percent on railways.

Investment in Infrastructure as a share of GDP and Change rate of Gross Value Added of Construction industry in India is given in table-1

Table-1: Investment in Infrastructure as a share of GDP and Change rate of Gross Value Added of Construction industry in India

Financial Year	Investment in Infrastructure as share of GDP (%)	Change rate of GVA of Construction Industry in India
2010	4.8	-
2011	4.7	-
2012	5.2	-
2013	5.0	0.3
2014	4.5	2.7
2015	4.1	4.3
2016	4.4	3.6
2017	4.5	5.9
2018	4.3	5.2
2019	4.4	6.3
2020	4.2	1.0
2021	3.9	-8.6

Source: Statistic

Building Railway routes, Road ways, Irrigation, housing, urban development and other public works are the major infrastructure activities.

Employment in Construction Industry

Construction Industry in India employees large proportion of its labour force. It is important in an labour abundant country. Traditionally, agriculture has been major employing sector and in the recent years construction sector has emerges as an labour-intensive sector in India. Construction sector gives scope for both salaries job as well as wage earning labourer.

Around 16.0 per cent of the Indian working population depends on construction sector for their livelihood. The Indian construction industry employs more than 50 million people and creates assets worth over ₹ 200 billion. The India construction market size was \$609.6 billion in 2021.22. It expects that the construction industry in India to expand by 5.8 percent in real terms this year, supported by increased

government investment in transport, healthcare, energy, and housing construction.

As per the CMIE economic outlook report, The trend in salaried jobs has been rising slowly and somewhat erratically during the pandemic months. In 2019-20, last pr-pandemic year, salaried jobs were 86.7 million. These jobs never recovered to their pr-pandemic levels. But, they seem headed there.

During 2021, employment within the real estate and construction sector in India dipped by 25.0 percent over a span of five years to roughly 54 million employees. The best performance in employment after 2020 since then was 84 million in September and October 2021. This fell to 77 million in November and December 2021. And it has bounced back to about 83 million in January and February 2022.

The recent increase in salaried jobs is reflected in increased employment in the more significant industries, such as mining, metals, chemicals, and machinery. Manufacturing industries added 1.8 million jobs during January and February 2022 and Mining added another 1.9 million. Retail trade, travel and tourism, and financial services added significant jobs in the services sectors. The increase in relatively better quality jobs is encouraging.

A recent report states that India’s real estate sector experienced, around 5.0 percent capital value growth in 2022 in the residential segment.

The employment statistics in construction sector of major countries in the world are given in table-2

Table-2: Top Countries in Construction Employment

Countries	Employment	Last (Year)	YoY	Five Years CAGR
USA	1,07,86,420	2020	-5.2 %	1.7%
India	8,67,00,000	2020	-	5.65%
Japan	49,86,670	2019	-0.09%	-0.3%
Russia	49,61,210	2019	-3.2 %	-1.8%
Mexico	42,94,930	2019	-2.8 %	2.9 %

Source:

No doubt, construction industry is an integral part of a country's infrastructure and industrial development and employees large labour force of the country However, it is typically a male dominated

industry and presents a major challenge for equal opportunities for women. India, one of the fastest growing economies in the world, is facing the global phenomenon of shortage of skilled workforce. To make up this shortage, it becomes imperative to convert untapped women resource.

India Construction Market Analysis

India's Construction Market is expected to register a CAGR greater than 10% during the forecast period (2022–2027). As COVID-19 expanded across the country in April 2020, the face of the Indian construction industry, which was already battling with inadequate management and a lack of tracking of its labor force, lost its central grip completely, bringing the industry to a halt. COVID-19 wreaked havoc on the value chain at all levels and scales also. The availability of construction materials and price inflation became important concerns. Cost overruns, severe delays, and even project cancellations resulted from the lack of timely implementation owing to lockdown.

The cancellation and postponement of projects had a direct impact on MSMEs, with many being forced to close their doors or reduce their operations. This was a big worry because most construction companies and design studios are small and focus on a specific type of building.

Despite the impact of COVID-19 limitations and lockdown on construction activity, India saw a fresh supply of 45 million sq ft in the year 2020, with 36 million sq ft coming from tier I cities and 8.9 million sq ft coming from tier II and III cities.

As per statistics, in 2021, the 3PL and e-commerce sectors, which accounted for 62.0 percent of total absorption in 2020, continued to drive warehouse demand, followed by the manufacturing sector, which accounted for 14.0 percent. In 2021, Delhi-NCR had the largest absorption among India's main cities, at 18.0 percent, followed by Pune at 15.0 percent. Absorption rates were 14.0 percent and 11.0 percent in Mumbai and Bangalore, respectively, with 20.0 percent in tier II and tier III cities.

In 2021, investments in the industrial and logistics sector exceeded USD 1.5 billion, making it the second-highest recipient of such funds after the office sector. This type of asset has stayed popular because it has a high growth rate and gives consistent returns.

The commercial real estate sub-sector is positioned for development as people return to workplaces and businesses adapt to hybrid working arrangements. As more companies send their workers back to work, there is a gradual rise in the need for commercial office space.

Problems

In spite of the fact that construction industries are growing with impressive rate, they are hindered by several problems. Delay in implementing projects, lack of technical laborers and low level of HRM, less women labour participation, cost uncertainty are few noted problems. Further, since construction sector is linked with several other industries of which few are MSMEs, problems of these industries are shifted to construction sector also.

The availability of construction materials and price inflation became important concerns. Cost overruns, severe delays, and even project cancellations resulted from the lack of timely implementation owing to lockdown. The cancellation and postponement of projects had a direct impact on MSMEs, with many being forced to close.

Future Prospectus

In India, the level of economic development it experiences have create more scope for construction sector. Urbanization, digitization, infrastructure development, targets on housing all shows that in future construction sector gains more importance. Urbanization indicates Cities Driving Growth - Urban population to contribute 75.0 percent of GDP (63% present), and 68 cities will have a population of more than 1 Mn. Schemes such as the revolutionary Smart City Mission (target 100 cities) are expected to improve quality of life through modernized/ technology driven urban planning. Over 3,500 cities have certified as ODF+ and 1,191 cities as ODF++ under SBM-U.

The construction industry market in India linked across 250 sub-sectors. The Real Estate Industry in India is expected to reach \$1 Tn by 2030 and will contribute 13.0 percent to India's GDP.

Residential Housing sector is another sub sector of construction industry, has set a encouraging target. By 2030, more than 40.0 percent of the population is expected to live in urban India (33% today), creating a demand for 25 Mn additional mid-

end and affordable units. Investment on Infrastructure is also promising to construction sector. Under NIP, India has an investment budget of \$1.4 Tn on infrastructures like renewable energy, roads and highways, urban infrastructure, and railways.

Industrial and Logistics sector has attracted about \$144 Mn of investment across green field and brownfield assets led by global investors, with a major share of 63.0 percent followed by domestic players during first two quarters of 2022. Global innovative construction technologies (54) were identified under a Technology Sub-Mission of PMAY-U to start a new era in Indian construction technology sector. All these shows better scope for Indian construction sector.

Conclusion

If the Indian construction industry grew at the predicated rate of 6.4 percent a year between 2018 and 2023 with a value of approximately US\$690 billion. In India, The construction industry it was forecast to grow by 12.8 percent to reach Rs.40,982 billion in 2022. A positive developments in economic conditions, improvement in investor confidence and investments in transport infrastructure, energy and housing projects helped the Indian construction industry grow 8.8 percent in 2018, increased from 1.9 percent in 2017.

Despite near-term challenges in certain construction sectors, medium to long term growth story in India remains intact. The construction industry in India is expected to grow steadily over the next four quarters. The growth momentum is expected to continue over the forecast period, recording a CAGR of 10.8 percent during 2022-2026. The construction output in the country is expected to reach Rs. 61,721.3 billion by 2026.

Demand from the Railways, Roadways and drinking water sectors are expected to improve in the coming years, supporting the growth of the construction industry in India. This, along with the increased spending from the government on infrastructure projects, is projected to drive market growth. The construction industry in India is expected to witness healthy revenue growth in the medium term. According to the report, the construction Gross Value Added (GVA) is projected to grow to 9.0 percent to 11.0 percent in 2022-23.

While buildings and roads continue to account for the bulk of the order book, urban and metro infrastructure, along with water and sanitation, have also seen significant expansion in the order book over the last few years. However, the rising commodity prices and the increased competition in the space are expected to have an impact on the construction industry's profitability. According to the ICRA report, the profitability is expected to decline 100 to 200 basis points in 2022-23.

Having future prospectus, construction industry have to be planned to grow with integrity and balanced with other sub-sectors. Economically it is more significant and to maintain labour force employed policy decision have to be taken by analyzing various issues and associated factors.

References

1. Haupt, T. & Fester, F. (2012); 'Women-owned Construction Enterprises: A South African Assessment', *Journal of Engineering, Design & Technology*, 10(1), pp. 52-71.
2. Ahuja, V. & Kumari Savitha, (2013); 'Indian Construction Industry – Training Needs and Issues', *Proceedings of the 18th Annual Convention and Seminar on 'Training, Skill Upgradation and Competence Development in Building Industry'* of Indian Buildings Congress, New Delhi, India, 20(1), pp 54-60.
3. Shumank Deep, Mohd Bilal Khan, Sabih Ahmad and Adeeba Saeed; 'A Study of Various Factors Affecting Contractor's Performance in Lowest Bid Award Construction Projects'. *International Journal of Civil Engineering and Technology*, 8(2), 2017, pp. 28–33.
4. Mayank Kumar Singh, Shumank Deep, Rajeev Banerjee; 'Risk management in construction projects as per Indian scenario' *International Journal of Civil Engineering and Technology (IJCIET)* Volume 8, Issue 3, March 2017, pp. 127–136
5. Ashwini Arun Salunkhe , Rahul S. Patil; 'Effect of construction delays on project time overrun: Indian scenario', *IJRET: International Journal of Research in Engineering and Technology*, Volume: 03 Issue: 01, Jan-2014
6. Tommy, Y., Fung, W. H., and Tung, C. F. (2006). "Construction delays in Hong Kong civil engineering projects". *J. Constr. Eng. and Mgmt.*, ASCE, 132(6), 636-649.
7. Global Data: Construction an Intelligence Center
8. India Construction Industry Report -2022